SR-186 TRANSPORTATION CONCEPT REPORT **DISTRICT 11- System Planning** May 1999

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TRANSPORTATION CONCEPT SUMMARY STATE ROUTE 186 (SR-186) 11-IMP-186 P.M. 0.0-2.1

This Transportation Concept Report (TCR) is a planning document which describes the Department's basic approach to the development of a given corridor. Considering reasonable financial constraints and projected travel demand, this TCR establishes a 20 year transportation planning concept for State Route 186 (SR-186).

The TCR is a preliminary planning phase that leads to subsequent programming and the project development process. As such, the specific proposed nature of improvements (i.e., number of lanes, access control, etc.) may change in later project development stages, with final determinations made during the project study report (PSR), project report (PR), and design phases.

Each TCR must be viewed as an integral part of a planned system. The TCR is based on the completion of the 20 year system. The system has been developed to meet anticipated travel demand generated from regional growth forecasts. Removal of any portion of a route from the system will adversely affect travel on parallel or intersecting routes.

The TCR is prepared by Caltrans District staff in cooperation with local and regional agencies. They will be updated as needed, as conditions change, or as new information is obtained.

ROUTE DESCRIPTION

State Route 186 is a north-south highway located in the southeastern portion of Imperial County near the California/Arizona border and within the Quechan Indian Reservation. The southern terminus begins at the U. S./Mexico international border at Andrade, California, (CA)/Algodones, Baja California, (BC). Post-Mile (PM) IMP 0.0. The northern terminus is at Interstate 8 (I-8) / PM IMP 2.1. The route is 3.38 kilometers (2.1 miles) in length.

PURPOSE OF ROUTE

SR-186 serves primarily international and recreational traffic. The route provides access to and from Mexico.

The existing facility and operating conditions for SR-186 are shown in Table S-1.

TABLE S-1 EXISTING FACILITY AND OPERATING CONDITIONS

	Segment/ County/ Post Mile	Location	# of Lanes/ Facility Type	1997 ADT*	Peak Hour V/C Ratio	Peak Hour Operating LOS
1	IMP 0.0 - 2.1	U.S./Mexico international border to I-8	2C	5,800	0.32	В

^{*} ADT (Average Daily Traffic) shown is a five-day ADT derived from seven-day ADTs developed by Caltrans' Traffic Census. ADT's and peak hour operating LOS (Level Of Service) vary based on seasonal fluctuations.

2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Table S-2 shows improvements to SR-186 that are part of the 2020 Transportation Concept. This table does not include projects currently under construction. The peak hour V/C ratio and peak hour Operating LOS listed assume completion of the proposed highway improvements.

TABLE S-2
2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Segment/ County/ Post Mile	Location	Improvement Description	ADT	Peak Hour V/C Ratio	Peak Hour Operating LOS	Concept LOS
1 IMP 0.0 - 2.1 U.S./Me		Upgrade from 2C to 4C	10,000	0.60	С	D

LOS = Level of Service V/C = Volume to Capacity Ratio

^{*} Note: On peak days during the winter months the ADT is12,000.

²C = Two lane conventional highway V/C = Volume to Capacity

TRANSPORTATION CONCEPT REPORT STATE ROUTE 186 (SR-186) 11-IMP-186 P.M. 0.0-2.1

INTRODUCTION AND STATEMENT OF PLANNING INTENT

The system planning process consists of three products: the District System Management Plan (DSMP), the Transportation System Development Plan (TSDP), and the Transportation Concept Report (TCR).

The DSMP describes how the District intends to maintain, manage, and improve the District transportation system over the next 20 years. The DSMP is developed in partnership with regional and local transportation planning agencies. The DSMP summarizes 20 year planning concepts and proposed transportation improvements on a system wide level, and influences the development of future transportation concepts and development plans. It integrates land use, modal opportunities, regional arterial plans, transportation system management, transportation demand management, highway system improvements, and the District highway network into a comprehensive transportation program. The DSMP serves as the foundation for the TSDP and the TCR's.

The Transportation System Development Plan (TSDP) is an internal Caltrans system planning document. Its purpose is to identify by district a reasonable and effective list of multimodal transportation improvements (infrastructure/capital outlay), strategies, and demand and system management options to improve statewide, interregional and regional mobility and intermodal transfer of people and goods. It includes both a Recommended Plan and a Cost Constrained Plan component, and categorizes improvements into two time frames, 2001-2015 and post-2015. It is based on analysis of current and projected future travel demand. The TSDP replaces the District 11 Route Development Plan.

The TSDP is an internal "sketch" planning document that broadens the Department's assessment of mobility options at an early preliminary planning stage. It expands system planning from a basic analysis of state highway route deficiencies to a larger integrated intermodal and multimodal analysis of travel corridors.

Improvements, strategies, and system management options identified in the TSDP will be Caltrans "candidates" for further detailed examination in state, metropolitan, regional or local studies and processes. The TSDP is also the Department's initial identification of areas under consideration for corridor studies with metropolitan agencies and rail/transit operators.

The TCR process was discussed in the Transportation Concept Summary.

ROUTE DESCRIPTION

State Route 186 is a north-south highway located in the southeastern portion of Imperial County near the California/Arizona border and within the Quechan Indian Reservation. The southern terminus begins at the U. S./Mexico international border at Andrade, California (CA) /Algodones, Baja California (BC), Post-Mile (PM) IMP 0.0. The northern terminus is at Interstate 8 (I-8), PM IMP 2.1. The route is 3.38 kilometers (2.1 miles) in length.

Purpose of Route

SR-186 serves primarily international and recreational traffic. The route provides access to and from Mexico.

Existing Facility Classifications

The functional classification for SR-186 is Rural Principal Arterial.

California Senate Bill 300, enacted in 1989, created an Interregional Road System (IRRS). Subsequently, Section 164.3 of the California Streets and Highways Code directed Caltrans to develop and submit to the Legislature an IRRS Plan by February 1, 1990. In accordance with this plan, the IRRS is a series of interregional state highway routes outside the urbanized areas that provides access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions. SR-186 is not part of the Interregional Road System.

The National Highway System (NHS) Designation Act of 1995 was enacted by Congress in November 1995. The purpose of the NHS is to provide an integrated national highway system that serves both urban and rural America; to connect major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; to meet national defense requirements; and to serve interstate and interregional travel. The new NHS includes the Interstate System routes. In Caltrans District 11, the NHS totals 789.0 km (490.3 miles). SR-186 is not included in the NHS.

SR-186 is a designated State Highway Terminal Access Route connecting trucks to the National Network as per the Surface Transportation Assistance Act (STAA), a route system federally designated for use by larger trucks.

To emphasize corridors that are most essential to the California economy in terms of national and international trade, a transportation network known as the Intermodal Corridors of Economic Significance (ICES) has been developed by Caltrans. To be included in the ICES system, a route should provide access between major freight intermodal facilities and serve freight traffic with the NAFTA countries of Canada and

Mexico, as well as the Pacific Rim and other U.S. trade markets. The route should carry high interstate and international freight volumes and value important to the economy of California. SR-186 is not included in the ICES system.

The Caltrans District 11 designated International Border Trade Corridor (IBTC) system consists of transportation corridors which link ports of entry and international border regions to the existing transportation system. These corridors will be the principle conduits for movement of people and goods as the overall demand for transportation increases in and out of California and the United States. SR-186 is not included in the IBTC system.

SR-186 is not included on the Master Plan of State Highways Eligible for Official Scenic Highway Designation.

For maintenance programming purposes, the State Highway System has been classified as Class 1, 2 and 3 highways based on the Maintenance Service Level (MSL) descriptive definitions:

MSL 1 contains route segments in urban areas functionally classified as Interstate, Other Freeway/ Expressway, or Other Principal Arterial. In rural areas, the MSL 1 designation contains route segments functionally classified as Interstate or Other Principal Arterial.

MSL 2 contains route segments classified as an Other Freeway/Expressway or Other Principal Arterial not in MSL 1, and route segments functionally classified as minor arterials not in MSL 3.

MSL 3 indicates a route or route segment with the lowest maintenance priority. Typically, MSL 3 contains route segments functionally classified as major or minor collectors and local roads, route segments with relatively low traffic volumes, and route segments being considered for relinquishment, rescission, or where a new alignment will replace the existing facility. Route segments where the District does not anticipate spending money and route segments where route continuity is necessary are also assigned an MSL 3 designation.

SR-186 is classified as MSL 2.

Existing Facility

SR-186 is a two lane conventional highway with 0-2.3 meter-(0-8') outside shoulders, and no inside shoulders or median. SR-186 has a flat gradeline and traverses through flat terrain.

The Andrade Port of Entry (POE) is located at the southern terminus of SR -186 at the international border. It is a small 0.8HA-(2-acre) site constructed in 1970. It has two

primary inspection lanes, four secondary inspection spaces, a main building and residence for the U.S. Customs Service.

In February 1999, the U.S. General Services Administration began a feasibility study of the Andrade POE. The study will address the possibility of expansion and realignment of the pedestrian and auto gates.

A physical description of the existing facility in a segment-specific format is shown in Table 1.

TABLE 1
EXISTING FACILITY GEOMETRICS

Segment	County/ Post Mile	No. Lanes & Facility Type	Lane Width	Outside Shoulder Width	Inside Shoulder Width	Max. R/W Width	Median Width	Grade Line
1	IMP 0.0 - 2.1	2C	3.7 (12)	1.2 (4)	00	61.0 (200)	00	F

Note: Widths are in meters, followed by feet

ROUTE ANALYSIS

This section includes a land use/corridor growth and demographic analysis for existing and future conditions in this corridor.

Corridor Growth and Demographics

Algodones, Baja California, is a community within the municipality of Mexicali with about 12,000 residents, growing at about 5 - 6 percent per year.

The Algodones/Andrade POE is used by commuters going from the northeastern part of Mexicali Valley to Yuma Valley to avoid paying tolls on the MX-2 Colorado River Bridge.

Imperial County

The seven incorporated cities of Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland account for three quarters of the total population of Imperial County. However, as more Specific Plan Areas (SPA) are developed, the unincorporated areas are projected to have a 338 percent increase in population from 1990 to 2020, while the incorporated cities are expected to grow 96 percent in the same time period. A 158 percent increase in housing stock and a 95 percent growth in employment is projected for Imperial County between 1990 and 2020.

The Imperial Valley is one of the world's most fertile agricultural areas, due to the rich, productive soil, abundant sunlight, flat topology and imported Colorado River water.

The wide range of crops grown include vegetables, such as lettuce, carrots, onions, tomatoes, cauliflower and broccoli; animal feed, such as sudan grass and alfalfa; grains, such as wheat; sugar beets; melons; cotton; and various citrus, fruits and nuts. Seed crops, bee products and nursery plants are also produced.

Imperial County is one of the most productive agricultural regions in the world. Since irrigation water was introduced in 1901, agriculture has been the single most important economic activity of Imperial County. Agriculture and its related industries employs 35 percent of the work force. Government is the second largest employer with 21 percent, followed by retail trade with 15 percent. Other significant contributors to the economy include winter visitors, State prisons near Calipatria and Seeley, the growing geothermal industry, mining, the second Mexico/USA border crossing at Calexico, and increased trade as a result of the North American Free Trade Agreement (NAFTA).

Livestock production is the second major form of agricultural production, and includes beef cattle, sheep, wool, dairy products and swine.

Imperial County is rich in geothermal resources. While Imperial County is a national leader in the development of its geothermal resources, development has not progressed as rapidly as projected due to high operating costs, slow growth in utility company demand and the relatively low cost of oil.

Yuma, Arizona

The major incorporated cities of San Luis, Sommerton, Wellton and Yuma City, and the Cocopah Indian Reservation Community account for one third the population of Yuma County.

Yuma County borders to the east of Imperial County with the Colorado River being the dividing line. Most of Yuma County's 5,552 square miles is desert land accented by rugged mountains. The valley regions, however, contain an abundance of arable land which is irrigated with Colorado River water. Yuma's access to the Colorado River is a great asset to this desert community. Yuma has perpetual rights to the water and to date uses about 50 percent of its allocation. Agriculture, tourism, military and government are the county's principal industries.

Although Yuma's economy is based mostly in agriculture, tourism contributes greatly to the areas growth. The population doubles during the winter months with the arrival of visitors from the north.

In addition to the above, Yuma's geographic location is of strategic value in the global trade economy. Often referred to as "the nation's new four corners," Yuma is located on the corner of four states: Sonora and Baja California Mexico; California and Arizona. It is expected that the NAFTA free trade agreement with Mexico will help the city expand and diversify its economy further.

Table 2 shows population, housing and employment growth for the County of Imperial, California, and for the City of Yuma, Arizona.

TABLE 2
POPULATION, HOUSING AND EMPLOYMENT GROWTH
SELECTED JURISDICTIONS

Location Yea			Year	Total	% Change	Total	%	Total	%
				Population	from Base Year	Housing Units	Change from Base Year	Employment	Change from Base Year
,	′	of	1990	109,303	0	32,842	0	46,118	0
ilai			2000	148,980	36 %	42,888	30 %	62,197	35 %
			2005	171,772	57 %	50,437	66 %	69,157	50 %
			2010	207,305	90 %	60,230	83 %	74,992	63 %
			2015	240,812	120 %	71,150	117 %	82,122	78 %
			2020	280,341	156 %	84,560	157 %	89,880	95 %
City	of	Yuma,	1990	56,960	0	46,541	0	28,178	0
			2000	67,820	19 %	55,383	19 %	33,531	19 %
			2005	74,335	31 %	60,736	30 %	37,772	34 %
			2015	90,235	58 %	73,720	58 %	44,633	58 %
	County	County rial	County of rial	County of 1990 erial 2000 2005 2010 2015 2020 City of Yuma, 1990 2000 2005	Location Year Population County of 1990 109,303 erial 2000 148,980 2005 171,772 2010 207,305 2015 240,812 2020 280,341 City of Yuma, 1990 56,960 2000 67,820 2005 74,335	Location Year Population Total from Base Year % Change from Base Year County of 1990 109,303 0 2000 148,980 36 % 2005 171,772 57 % 2010 207,305 90 % 2015 240,812 120 % 2020 280,341 156 % City of Yuma, 1990 56,960 0 2000 67,820 19 % 2005 74,335 31 %	Population From Base Year Units County of 1990 109,303 0 32,842 erial 2000 148,980 36 % 42,888 2005 171,772 57 % 50,437 2010 207,305 90 % 60,230 2015 240,812 120 % 71,150 2020 280,341 156 % 84,560 City of Yuma, 1990 56,960 0 46,541 2000 67,820 19 % 55,383 2005 74,335 31 % 60,736	Location Year Population Total From Base Year Wear Change From Base Year Total Housing Units % Change From Base Year County of 1990 109,303 0 32,842 0 2000 148,980 36 % 42,888 30 % 2005 171,772 57 % 50,437 66 % 2010 207,305 90 % 60,230 83 % 2015 240,812 120 % 71,150 117 % 2020 280,341 156 % 84,560 157 % City of Yuma, 1990 56,960 0 46,541 0 2000 67,820 19 % 55,383 19 % 2005 74,335 31 % 60,736 30 %	Location Year Population Total From Base Year Housing Units Total Housing From Base Year Change From Base Year Employment From Base Year County Population Population Population 0 32,842 0 46,118 2000 148,980 36 % 42,888 2005 171,772 57 % 50,437 66 % 69,157 66 % 69,157 66 % 69,157 2010 207,305 90 % 60,230 2015 240,812 120 % 71,150 117 % 82,122 117 % 82,122 2020 280,341 156 % 84,560 157 % 89,880 City of Yuma, 1990 56,960 0 0 46,541 0 28,178 2000 67,820 19 % 55,383 19 % 33,531 2005 74,335 31 % 60,736 30 % 37,772

Projected Growth determined from the years 1990 - 1995 data increase

Source: County of Imperial, City of Yuma

The 1993 Imperial County General Plan Update identifies several Specific Plan Areas (SPA) within the county that could have an effect on future operating conditions on State highway facilities in Imperial County. The intent of the General Plan in regard to the SPA is to ensure that future development occurring within the designated areas is in conformance with the County's General Plan Land Use Element. Any new developments proposed within the SPA must have an approved Specific Plan prior to commencement of development activities.

TABLE 3
SELECTED IMPERIAL COUNTY SPECIFIC PLAN AREAS

Imperial County Specific Plan Areas

Tamarack Canyon Ranch SPA Mesquite Lake SPA Glamis SPA Calexico East SPA

Source: County of Imperial General Plan, 1993

Type of Development

Resort/Recreational Light, Medium And Heavy Industrial Commercial/Retail/Services Commercial/ Industrial

TRANSPORTATION CONCEPT (2020)

The 2020 Transportation Concept includes the State Highway component, which is comprised of the facility type and the number of lanes for 2020, the ADT for 2020, the peak hour Volume to Capacity (V/C) Ratio for 2020, the peak hour Operating Level of Service (LOS) for 2020, and the Transportation Concept LOS for 2020. The 2020 traffic projections for SR-186 are based on Caltrans future traffic projections. The 2020 traffic projections are subject to change based on periodic traffic forecasting model adjustments and ongoing supplemental transportation studies.

The 2020 peak hour Operating LOS includes all State highway improvements.

TABLE 4
2020 TRANSPORTATION CONCEPT

Segment/ County Post Mile	Location	No. Lanes/ Facility Type	ADT	Peak Hour V/C Ratio	Peak Hour Operating LOS	Concept LOS
1 IMP 0 0 - 2 1	U.S./Mexico international border to I-8	4C	10 000	0.60	С	D

ADT = Average Daily Traffic V/C = Volume to Capacity LOS = Level of Service 2C = Two lane conventional highway

The Intermodal Surface Transportation Efficiency Act (ISTEA) requires studying the advisability of establishing a discretionary international border crossing program and the development of a multimodal assessment of existing and emerging international trade corridors within Canada, Mexico and the United States. Because of District 11's geographic location adjacent to the State of Baja California, Mexico, and the passage of the North American Free Trade Agreement (NAFTA), it is expected that transportation and trade issues related to the California/Mexico International border will increase in importance in the future.

On June 9, 1998 the President signed into law PL 105-178, the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit and other surface transportation programs for the next 6 years. TEA-21 builds on the initiatives established in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The new Act adds some new programs that address traffic safety, economic competitiveness and international trade.

CONCEPT RATIONALE

The Transportation Concept for SR-186 for the year 2020 is to upgrade the existing two

lane conventional highway to a four lane conventional highway. Its conceivable that the upgrade to four lanes could occur within 10 years. This will be necessary to accommodate future cross-border vehicular travel. Widening SR-186 to a four lane highway is also discussed in the 1997 Imperial County Transportation Plan Highway Element.

There has been recent discussions between Caltrans, the Quechan Indians, and the City of Mexicali, Mexico to consider a future relocation of the vehicular crossing at Andrade. Studies are needed to determine technical issues and environmental impacts associated with this proposed relocation. This future relocation also requires federal approval and action.

The Cocopah and Quehcan Indians are planning extensive developments such as casinos, hotels and golf courses. They have several traffic plans under consideration including new ramps on I-8 and new access at SR-186. Further information regarding these improvements is included in the Caltrans March,1998 Project Studies Report. The report calls for a new I-8 Interchange at Seminole road and the construction of a new bridge over the Colorado River for a four lane arterial route south from the proposed interchange through the Cocopah Indian Reservation.

Table 5 shows both northbound annual passenger vehicles volumes and northbound annual truck volumes from 1991-1997 at the Andrade POE. Southbound volumes are not shown because of lack of data availability.

TABLE 5
ANDRADE PORT OF ENTRY

CONVEYANCE	ARRIVALS	1994	1995	1996	1997	1998
	Trucks	3,114	3,818	3,935	3,078	2,137
	Buses	-	-	-	59	173
Passenge 553,668	r Vehicles 573,929	523,382		526,137	556,441	
PERSON ARRI	VALS					
	Via Truck	5,833	6,883	6,888	5,418	3,833
	Via Buses	-	-	-	2,247	5,012
Via Passeng 1,649,923	er Vehicle 1,710,3	1,554,576 317	1	,573,941	1,657,38	
On Foot (Per 1,417,541	destrians)	954,372	1	,113,538	1,300,042	1,350,200

Source: General Services Administration

During the winter season, the desert areas and the campgrounds around Yuma Arizona and the Colorado River experience an increase in population attributable to an influx of "snowbirds". These are generally recreational vehicles users who travel to this area from colder climates. Many of these visitors utilize SR-186 to go to Algodones, Baja California in search of medical, dental, and pharmaceutical services. They generally park their vehicles on the U.S. side of the international border and walk across to Mexico. The latest numbers available from the U.S. Customs Service indicates that there were 1,114,000 northbound pedestrian crossings at the Andrade/Algodones POE in 1995. 215,630 pedestrians crossed northbound in February, only 26,400 in August.

AIR QUALITY

Air Pollution Control Districts (APCD) are responsible for developing air quality plans directed at meeting the National Ambient Air Quality Standards (NAAQS) set by the U.S. Environmental Protection Agency (EPA). The NAAQS identify specific pollutants and acceptable pollutant threshold levels for each region. Areas where a pollutant problem exists are classified as "non-attainment" areas. Deadlines for attainment of the NAAQS have been specified in the federal Clean Air Act (CAA).

In Imperial County, SR-186 is located within the Salton Sea Air Basin. Air quality planning for Imperial County is administered through the Imperial County Air Pollution Control District (ICAPCD). The regional emissions from within the Salton Sea Air Basin do not significantly affect the regional air quality in Imperial Valley. The only pollutants

for which federal and/or state air quality standards have been exceeded in the ICAPCD area are ozone (O_3) and suspended particulates (PM_{10}) . The standards for O_3 are exceeded only a few times a year in Imperial County. PM_{10} standards are exceeded primarily due to field burning and travel on unpaved roads. Refuse burning in Mexicali, Mexico is an additional factor in the exceedance of PM_{10} within Imperial County, particularly in the southern portion of the county. The U.S. EPA and the Secretaria de Desarrollo Social (SEDESOL) have agreed to bilateral participation in a particulate study between Mexicali and Imperial County. The study will include workshops on emission survey techniques, ambient sampler operation and maintenance, meteorological measurement systems, and training in particulate pollution modeling techniques.

COMPARISON OF CONCEPTS

The purpose of this section is to document alternative Transportation Concepts that were considered. The Concept from the April, 1985 Route Concept Report (RCR) for the year 2005 is compared with this 1998 TCR for the year 2020.

Table 6 is comprised of a segment by segment comparison between the 1985 Route Concept Report and this current updated Transportation Concept Report.

TABLE 6 COMPARISON OF CONCEPTS

1999 Transportation Concept for 2020

Location	No. Lanes/ Facility Type/ Concept LOS	Location	No. Lanes/ Facility Type/ Concept LOS
U.S./Mexico international border to I-8	2C/C	U.S./Mexico international border to I-8	4C/D

2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Table 7 shows improvements to SR-186 that are part of the 2020 Transportation Concept. This table does not include projects currently under construction. The peak hour V/C ratio and peak hour operating LOS listed assume completion of the proposed highway improvements.

TABLE 7 2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Segment/ County/ Post Mile	Location	Improvement Description	Peak Hour V/C Ratio	Peak Hour Operating LOS	Concept LOS	
1 IMP 0.0 - 2.1	U.S./Mexico international border to I-8	Upgrade from 2C to 4C	0.60	С	D	

POST-2020 ULTIMATE TRANSPORTATION CORRIDOR

The post-2020 Ultimate Transportation Corridor (UTC) describes the long term (beyond the 20 year planning period) right of way requirements for a particular segment. The long term needs are determined by Advanced Transportation System Development (ATSD) activities which include investigation and analysis of Community Plans, General Plans, Transportation Plans, Land Use Plans, Environmental Documents, and other planning documents. The intent is to take advantage of or develop opportunities for long term right of way acquisition and to work with local and regional agencies to implement corridor preservation measures.

The UTC proposes the number of lanes, the facility type, and the potential right of way width in feet. This width can be variable depending upon the dimensions of cross-sectional elements and specific circumstances which may require narrow widths. Right of way width includes the roadbed, shoulder, clear recovery zone, and clearance from the right of way line to the catch point of the cut or fill slope. Additional right of way may be required for structures, slope modifications and drainage facilities.

The UTC number of lanes and facility type for SR-186, is the same as the 2020 Transportation Concept, which calls for upgrading the existing two lane conventional highway to a four lane conventional highway. This UTC is based on the 1997 Imperial County Transportation Plan Highway Element.

LEVEL OF SERVICE (LOS) DEFINITIONS

LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. An LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort and convenience, and safety. LOS definitions can generally be categorized as follows:

<u>LOS</u>	<u>V/C</u>	Congestion/Delay	<u>Traffic Description</u>				
(Used for all conventional highways)							
"B"	<0.45	None	Free to stable flow, light to moderate volumes.				
"C"	0.46 - 0.65	None to Minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.				
"D"	0.66 - 0.85	Minimal to Substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.				
"E"	0.86 - 1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.				
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds per vehicle.				

SR-186 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS DISTRICT 11- System Planning



I approve this Transportation Concept Report as the guide for development of State Route 186 over the next 20 years.

Su	bmitted	By:
		-,,

KIMBERLY WEINSTEIN, Chief System Planning Branch

Recommended By:

CARL R. WEST

District Division Chief, Planning

Approved By: